



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

19-AMRP-0071

AUG 07 2019

Ms. Alexandra K. Smith, Program Manager
Nuclear Waste Program
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Dear Ms. Smith:

REVISED ADDENDUM G, PERSONNEL TRAINING, IN RESPONSE TO ECOLOGY'S COMPLETENESS DETERMINATION FOR THE HANFORD FACILITY DANGEROUS WASTE PART B PERMIT APPLICATION FOR SOLID WASTE OPERATIONS COMPLEX OPERATING UNIT GROUPS

- References: (1) Ecology ltr. to S. L. Charboneau, RL, and J. A. Ciucci, CHPRC, from S. Dahl, "Re: Completeness Determination for the Hanford Facility Dangerous Waste Part B Permit Application; Low-Level Burial Grounds Trenches 31-34-94, T Plant Complex, and Central Waste Complex – Waste Receiving and Processing Facility Operating Unit Groups, Received January 28, 2016," 16-NWP-083, dtd. May 12, 2016.
- (2) RL ltr. to J. A. Hedges, Ecology, from S. L. Charboneau, "REISSUE – Submittal of DOE/RL-2015-74, Hanford Facility Dangerous Waste Part B Permit Application; Low-Level Burial Grounds Trenches 31-34-94, T Plant Complex, and Central Waste Complex – Waste Receiving and Processing Facility Operating Unit Groups," 16-ESQ-0028 REISSUE, dtd. January 28, 2016.

This letter transmits to the Washington State Department of Ecology (Ecology), the revised and certified permit application materials for the Hanford Facility Dangerous Waste Permit Application for Solid Waste Operations Complex (SWOC) Operating Unit Groups (OUGs): Central Waste Complex – Waste Receiving and Processing Facility, Low-Level Burial Grounds 31-34-94, and T Plant Complex. The permit application materials are being submitted in response to Ecology's completeness determination Reference (1) for the original SWOC Part B Permit Application Reference (2).

Ms. Alexandra K. Smith
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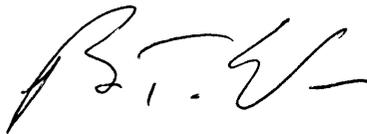
Ecology's completeness determination concluded the proposed permit application was incomplete and identified the permit components necessary to complete the application. Ecology cited the following deficiency for Addendum G, "Personnel Training:"

"The written Dangerous Waste Training Plans are not provided. Information contained in the written Dangerous Waste Training Plans is required to be included in the Personnel Training addenda. As a result, it is not possible to determine if the information in the permit application is complete (all three OUGs)."

In response to Ecology's cited deficiency, changes to Addendum G for all three OUGs were established over a series of meetings and informal correspondence between the Permittees and Ecology. This transmittal contains the updated Addendum G for each SWOC OUG in Attachment 2.

If you have any questions, please contact me or your staff may contact Bill Hamel, Assistant Manager for the River and Plateau, on (509) 373-9971.

Sincerely,



Brian T. Vance
Manager

AMRP:DBC

Attachments:

1. Certification Statements
2. Updated Addendum G for Each
Solid Waste Operations Complex
Operating Unit Group

cc: See page 3

Ms. Alexandra K. Smith
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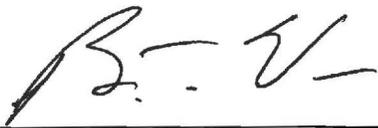
AUG 07 2019

cc w/attachs:

J. Atwood, YN
D. J. Alexander, Ecology
D. B. Bartus, EPA
J. Bell, NPT
R. Buck, Wanapum
L. Contreras, YN
S. L. Dahl-Crumpler, Ecology
K. A. Elsethagen, Ecology
E. A. Garcia, CHPRC
S. R. Horn, CHPRC
M. N. Jaraysi, CHPRC
S. K. Johansen, CHPRC
M. Johnson, CTUIR
S. N. Schleif, Ecology
J. H. Temple, Ecology
Administrative Record (TSDs: D-2-9, TS-2-4, TS-2-7)
Ecology NWP Library (Hardcopy)
Environmental Portal
HF Operating Record (J. K. Perry, MSA, A3-01)

Certification
for
Response to technical deficiencies and submittal of revised Addendum G,
"Personnel Training," for CWC-WRAP, OUG-6; LLBG 31-34-94, OUG-17; and T Plant
Complex, OUG-9

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



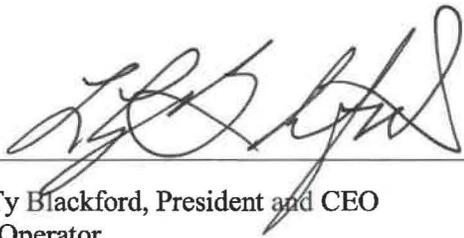
Brian T. Vance, Manager
Owner/Operator
U.S. Department of Energy
Richland Operations Office

8/16/2019

Date

Certification
for
Response to technical deficiencies and submittal of revised Addendum G,
“Personnel Training,” for CWC-WRAP, OUG-6; LLBG 31-34-94, OUG-17; and T Plant
Complex, OUG-9

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”



L. Ty Blackford, President and CEO
Co-Operator
CHPRC
Richland, Washington



Date

Addendum G, Personnel Training, for SWOC OUGs: CWC-WRAP, LLBG 31-34-94, and T Plant Complex

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

CH2MHILL
Plateau Remediation Company

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Addendum G, Personnel Training, for SWOC OUGs: CWC-WRAP, LLBG 31-34-94, and T Plant Complex

H. F. McClendon
CH2M HILL Plateau Remediation Company

Date Published
July 2019

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

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APPROVED
By Julia Raymer at 10:21 am, Jul 24, 2019

Release Approval

Date

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Addendum G
Personnel Training

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G1 Introduction

This addendum discusses personnel training requirements based on WAC 173-303, “Dangerous Waste Regulations,” and WA7890008967, *Hanford Facility Resource Conservation and Recovery Act Permit* (hereinafter called Hanford Facility RCRA Permit) for the Central Waste Complex (CWC)-Waste Receiving and Processing Facility (WRAP) Operating Unit Group (OUG).

Permittees will comply with the training outlined in Tables G-1 and G-2, which provide the training requirements for Hanford Facility personnel associated with dangerous and/or mixed waste management activities at CWC-WRAP.

G1.1 Introductory and Continuing Training Program

The dangerous waste training program consists of introductory and continuing training that are designed to prepare personnel to manage and maintain the CWC-WRAP facilities in a safe, effective, and environmentally sound manner. In addition to preparing personnel to manage and maintain the CWC-WRAP facilities under normal conditions, the training program ensures that personnel are prepared to respond in a prompt and effective manner should abnormal or emergency conditions occur. Emergency response training is consistent with the description of actions contained in CWC-WRAP Addendum J, “Contingency Plan.”

The introductory and continuing training programs contain the following objectives:

- Teach Hanford Facility personnel to perform their duties in a way that ensures compliance with WAC 173-303.
- Teach Hanford Facility personnel dangerous waste management activities (including implementation of the contingency plan) relevant to the job titles/positions in which they are employed.
- Ensure Hanford Facility personnel can respond effectively to emergencies.

The introductory and continuing training programs meet the requirements of WAC 173-303-330, “Personnel Training,” through general Hanford Facility training, Contingency Plan training, Emergency Coordinator training, and Operations training as outlined in this section.

G1.1.1 Introductory Training

Introductory training includes general Hanford Facility training and unit-group specific training. General Hanford Facility training is described below. Unit-group specific training is provided to CWC-WRAP personnel allowing those personnel to work unescorted, and in some cases is required for escorted access. Personnel cannot perform a task for which they are not properly trained, except to gain required experience while under the direct supervision of a supervisor or coworker who is properly trained as described in Section G2.1. Personnel must be trained within six months after their employment at or assignment to the Hanford Facility, or to a new job title/position at the Hanford Facility, whichever is later.

General Hanford Facility training: Hanford Facility personnel will receive general Hanford Facility training described in Hanford Facility RCRA Permit Attachment 5, “Hanford Facility Personnel Training Program,” within six months of hire. This training provides an orientation on dangerous waste management activities conducted at the Hanford Facility and includes the following:

- Description of emergency signals and appropriate personnel response
- Identification of contacts for information regarding dangerous waste management activities

- 1 • Introduction to waste minimization concepts
- 2 • Identification of contact(s) for emergencies involving dangerous waste
- 3 • Familiarization with the applicable portions of the Hanford Facility RCRA Permit Attachment 4,
- 4 “Hanford Emergency Management Plan” (DOE/RL-94-02)

5 The Permittees will provide the necessary training to non-CWC-WRAP personnel or visitors as
6 appropriate for the locations and activities undertaken. Non-CWC-WRAP personnel or visitors include
7 individuals not permanently assigned exclusively to the CWC-WRAP facility and who do not have
8 dangerous waste management responsibilities or supervision of such activities. These individuals include
9 but are not limited to administrative personnel, regulatory oversight, transient sampling personnel not
10 permanently assigned to the CWC-WRAP facility, and personnel utilized for temporary assignments. For
11 Soil and Groundwater Samplers, refer to Attachment 8, *Training and Inspection Plan for Groundwater*
12 *Monitoring Wells*.

13 Contingency Plan training: CWC-WRAP personnel receive training on applicable portions of
14 DOE/RL-94-02 in the general CWC-WRAP training. To ensure effective emergency response, personnel
15 receive training on the content of the actions described in Addendum J as well.

16 Emergency Coordinator training: CWC-WRAP personnel facilitating emergency coordinator duties,
17 WAC 173-303-360, “Emergencies,” such as the Building Emergency Director (BED) within the Hanford
18 Incident Command System (ICS), receive training on implementing Addendum J and ICS BED
19 responsibilities. These personnel must also become thoroughly familiar with applicable contingency plan
20 documentation, operations, activities, location and properties of all waste handled, location of all records,
21 and the unit/building layout.

22 Emergency Coordinator training consists of the BED training courses required for facility BEDs
23 described in Table G-1.

24 Operations training: Dangerous waste management operations training (e.g., waste designation training,
25 shippers training) will be determined on a unit-by-unit basis and shall consider the type of activities
26 performed at the OUG (e.g., surveillance). Training provided for CWC-WRAP operations is identified in
27 Tables G-1 and G-2. Operations training consists of the following subjects:

- 28 • Container management
- 29 • Waste handling
- 30 • Container packaging and labeling
- 31 • Position specific training as detailed in Tables G-1 and G-2

32 **G1.1.2 Continuing Training**

33 In accordance with the requirements for WAC 173-303-330(1)(b), “Personnel Training,” dangerous waste
34 workers participate in an annual review of training, including general Hanford Facility training and unit-
35 group specific training. The frequencies for individual training courses is described below.

36 General Hanford Facility training: Annual refresher training is provided for general Hanford Facility
37 training. Refer to description in Section G1.1.1.

38 Contingency plan training: Annual refresher training is provided for contingency plan training. Refer to
39 description above in Section G1.1.1.

1 Emergency coordinator training: Annual refresher training is provided for emergency coordinator training
2 including the BED training course (Table G-1). Refer to description above in Section G1.1.1.

3 Operations training: Refresher training occurs on many frequencies (i.e., annual, every other year, and
4 every 3 years) for operations training. When justified, some training will not contain a refresher course
5 and will be identified as a one-time only training course. Tables G-1 and G-2 specify the frequency for
6 each training course.

7 **G2 Description of Training Program**

8 The dangerous waste training program is overseen by a training manager who is knowledgeable in
9 dangerous waste management procedures and is otherwise qualified to design a dangerous waste training
10 program by a combination of education and relevant experience. These qualifications are listed in
11 Table G-3 as required by WAC 173-303-330(2)(a).

12 Training elements of WAC 173-303-330(1)(e) applicable to the CWC-WRAP operations include the
13 following:

- 14 • Procedures for using, inspecting, repairing, and replacing emergency and monitoring equipment
- 15 • Communications or alarm systems
- 16 • Response to fires or explosions

17 Proper design of the training program ensures CWC-WRAP personnel responsible for facilitating these
18 elements are compliant with WAC 173-303 requirements. Actual job tasks, referred to as duties, include
19 the above-referenced elements and are used to determine training requirements. As such, CWC-WRAP
20 personnel receive training pertinent to the duties they perform. CWC-WRAP duties are outlined in
21 Table G-3. Tables G-1 and G-2 contain specific information regarding the training requirements for
22 CWC-WRAP personnel.

23 **G2.1 Qualification of Staff (including OJT)**

24 Training consists of a combination of self-study, classroom instruction, computer-based training, and on-
25 the-job training (OJT) through the use of a qualification card.

26 A qualification card is the formal mechanism used to document the specialized training and performance
27 requirements of a specific job/task (e.g., waste management, waste shipping, etc.). Qualification cards list
28 the specific courses, required reading, and OJT activities that must be completed in order for personnel to
29 perform the job task independently. OJT activities involve qualified personnel demonstrating a specific
30 task, allowing the trainee to practice the task under supervision of the qualified OJT instructor.

31 The trainee's knowledge and skills are then evaluated against established standards. This can include
32 written and/or oral examinations, evaluations, and reviews to ensure that they are adequately trained
33 commensurate to their job title(s)/position(s). Results of examinations, evaluations, and reviews are
34 documented. Completed checklists, examinations and evaluations are placed in each individual's training
35 record.

36 These qualification cards are generally required to be completed within 6 months, as a means to record
37 that personnel who perform dangerous waste activities have been provided training within 6 months of
38 assignment. Qualification/proficiency training may, of necessity and in accordance with the provisions of
39 the collective bargaining agreements, take longer than 6 months to complete. In no case would
40 unqualified personnel be allowed to complete specified tasks without direct oversight of certified
41 personnel.

1 **G2.2 Review of the Training Program**

2 Facility training provides for frequent, systematic review of the various components of the training
3 program through multiple processes.

- 4 • All employees are required to complete Hanford General Employee Training (HGET) on an annual
5 basis. This training is subject to biennial evaluation by HGET Approval Authorities who review, and
6 revise HGET lessons when deemed necessary.
- 7 • The Permittee accounts for rule changes, facility changes, observed difficulties, and staff feedback to
8 incorporate changes to training curricula, and/or frequency to address such new or changing
9 circumstances.
- 10 • Another element of the training program is to ensure employees are assigned the correct training. To
11 accomplish this, annual employee training plan reviews are conducted by assigned managers.
- 12 • At the student level, the effectiveness of the training program is determined by reviewing student
13 feedback (e.g., evaluation forms) and evaluating student performance (e.g., test scores). Any changes
14 deemed necessary to the training, will be addressed with a revision and documented in the operating
15 record.
- 16 • The training matrices (Table G-1 and G-2) included in this addendum indicate regularly scheduled
17 (required) refresher training frequencies of individual courses for the express purpose of ensuring a
18 regimented review of course material at a topical level on a specified interval.

19 **G3 Description of Training Plan**

20 The WAC 173-303-330 requirements for training are satisfied by this addendum. A description of how
21 documentation meets the three items in WAC 173-303-330(2) is as follows:

22 WAC 173-303-330(2)(a): *The job title, job description, and name of the employee filling each job. The*
23 *job description must include requisite skills, education, other qualifications, and duties for each position.*

24 Description: The specific personnel job title/position is correlated to the dangerous waste
25 management duties. Dangerous waste management duties relating to WAC 173-303 are correlated to
26 training courses to verify that training is properly assigned.

27 Only names of CWC-WRAP personnel who carry out duties relating to unit-group dangerous waste
28 management activities are maintained. A list of personnel assigned to CWC-WRAP is available upon
29 request.

30 A summary of requisite skills, education, and other qualifications for job title(s)/position(s) is
31 summarized in Table G-3. Detailed information concerning job title, requisite skills, education, and
32 other qualifications for personnel can be provided upon request.

33 WAC 173-303-330(2)(b): *A written description of the type and amount of both introductory and*
34 *continuing training required for each position.*

35 Description: In addition to the outline provided in Section G1.1, training courses developed to comply
36 with the introductory and continuing training programs are identified and described in Tables G-1 and
37 G-2. Certain job titles/positions identified in Table G-1 may have some variability of task
38 assignment/responsibility. Personnel assigned specific dangerous waste management duties within a

1 job title/position are only required to take the necessary training specific to those duties. Training for
2 assigned dangerous waste management duties are located in Table G-2.

3 Note that equivalent training can be used to meet the dangerous waste training requirements outlined
4 in Tables G-1 and G-2. Employees can substitute courses for the required training if the course is both
5 similar in nature and quality and accomplishes the duties of the position to which he or she is
6 assigned. Personnel must show by documentation or certification that an employee's training has
7 resulted in training equivalency to the training required.

8 WAC 173-303-330(2)(c): *Records documenting that personnel have received and completed the*
9 *training required by this section. The Department may require, on a case-by-case basis, that training*
10 *records include employee initials or signature to verify that training was received.*

11 Description: As specified in Permit Condition II.C.1., the Permittees will maintain documentation in
12 accordance with WAC 173-303-330(2) and (3) in the Hanford Facility Operating Record
13 (CWC-WRAP portion).

14 Note that training records are maintained in accordance with the requirements of the *Privacy Act of*
15 *1974*. Training records for personnel are available for inspection purposes through 59 FR 17091,
16 which gives federal, state, and local government officers 'routine use' access to training records
17 where a regulatory program being implemented is applicable to a DOE or contractor program.

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Applicable Location	Job Title/Position						
				DOS/SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
GENERAL										
000001	Hanford General Employee Training (CBT) ➤ <i>Standard alarms, chemical spills, security, hazards, signs, escorts, badge requirements, and overall safety</i>	Annual	CWC-WRAP	X	X	X	X	X	X	X
FACILITY HEALTH & SAFETY										
300701	Central Waste Complex (CWC) Orientation (CBT) ➤ <i>CWC facility overview, entry requirements, staging areas, and overall safety</i>	Initial	CWC	X	X	X ^b	X	X	X	X
300536	CWC, LLBG, and WRAP Facility Emergency and Hazard Identification Checklist (CBT) ➤ <i>Location/content of facility-specific hazards, hazard communication program, facility response actions, and waste management practices</i>	Annual	CWC	X	X	X ^b	X	X	X	X
306750	WRAP Facility Orientation (CBT) ➤ <i>WRAP facility overview, entry requirements, standard alarms, staging area, and overall safety</i>	Initial	WRAP	X	X	X ^b	X	X	X	X
WASTE MANAGEMENT										
035100	Container Waste Management (Classroom) ➤ <i>Waste minimization and pollution prevention, waste designation categories, recordkeeping, and container inspection and management</i>	Initial	CWC-WRAP	X	X	X ^d	X ^e	X		
035110	Container Waste Management Refresher ^c (CBT) ➤ <i>Waste minimization and pollution prevention, waste designation categories, recordkeeping, and container inspection and management</i>	Annual	CWC-WRAP	X	X	X ^d		X		

G-6

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Applicable Location	Job Title/Position						
				DOS/SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
02006G	Waste Management Awareness (Classroom) ➤ <i>Introductory waste management topics, waste minimization, notifications, spills, and recordkeeping</i>	Initial	CWC-WRAP				X ^e			
BUILDING EMERGENCY										
02028B	Building Emergency Director Initial Training (Classroom) ➤ <i>BED performance expectations and responsibilities as outlined in DOE/RL-94-02 for preparation, response, and recovery from emergency events at respective facility</i>	Initial	CWC-WRAP							X
037515	Building Emergency Director Refresher Training ^c (CBT) ➤ <i>Refresher for BED performance expectations and responsibilities as outlined in DOE/RL-94-02</i>	Annual	CWC-WRAP							X
304466	SWOC Building Emergency Director Qualification Card Checklist (OJT) ➤ <i>Emergency response actions and responsibilities of the BED specific to SWOC facilities</i>	Initial	CWC-WRAP							X
ENVIRONMENTAL										
600100	Environmental Compliance Officer – Core (OJT) ➤ <i>Knowledge of environmental regulations, permits, regulator inspections and notifications, recordkeeping, and pollution prevention practices</i>	Initial	CWC-WRAP						X	

G-7

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Applicable Location	Job Title/Position						
				DOS/SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
600304	Waste Disposition – ECO (OJT) ➤ <i>Facility specific environmental requirements and processes, including management of regulated waste and environmental impacts from operations</i>	Initial	CWC-WRAP						X ^f	
FACILITY MANAGEMENT										
300402	SWSD Waste Management Exam (E/E) ➤ <i>Waste management at SWSD</i>	Every 2 years	CWC	X	X					
300222	Central Waste Complex Surveillance Qualification Exam (E/E) ➤ <i>Surveillance activities associated with CWC and mandated by dangerous waste regulations and internal procedures</i>	Every 2 years	CWC	X	X					
300988	CWC Storage Exam (E/E) ➤ <i>Tasks associated with storage operations at CWC including labeling, tracking, receipt and shipments, and waste placement</i>	Every 2 years	CWC	X	X					
300226	Core Fundamental for Shift Managers in Training Qualification Card (OJT) ➤ <i>Management of activities and tasks associated with emergency response, emergency or abnormal operations, inspections, and communications</i>	Initial	CWC-WRAP	X						
604241	Field Work Supervisor Qualification Card (OJT) ➤ <i>Management of activities and tasks associated with emergency response, environmental permits, and reporting</i>	Initial	CWC-WRAP	X	X					

G-8

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Applicable Location	Job Title/Position						
				DOS/SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
301130	CWC/LLBG Operations Supervisor Qualification Card (OJT, PD) ➤ <i>Facility specific management of activities and tasks associated with emergency response, emergency or abnormal operations, inspections, and communications</i>	Every 2 years	CWC	X	X					
301135	CWC/LLBG Shift Duty Officer Qualification Card (OJT, PD) ➤ <i>Management of activities and tasks associated with emergency response, inspections, and container shipments</i>	Every 2 years	CWC	X						
306610	WRAP Duty Operations Supervisor Qualification Card (OJT) ➤ <i>Management of activities and tasks associated with emergency response, inspections, and container shipments</i>	Every 2 years	WRAP	X						

G-9

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Applicable Location	Job Title/Position						
				DOS/SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
306615	WRAP Operations Supervisor Qualification Card (OJT) ➤ <i>Management of activities and tasks associated with emergency response, inspections, and container shipments</i>	Every 2 years	WRAP	X	X					

a. See Table G-2 for qualification training needed for specific Waste Service Provider and NCO duties.

b. Personnel that do not have this training will be escorted.

c. Refresher/qualification training is taken only after the initial training is completed.

d. Course not required for Waste Service Providers – Waste Shipper.

e. Maintenance Crafts may take course 02006G or 035100. Course 02006G is an awareness level class that satisfies the requirements of the job duties. Course 035100 is an operational level class that satisfies and exceeds the requirements identified in course 02006G.

f. Required training only for permanently assigned ECO.

BED = Building Emergency Director

NCO = Nuclear Chemical Operator

CBT = Computer Based Training

OJT = On-the-Job Training

CWC = Central Waste Complex

PD = Performance Demonstration

ECO = Environmental Compliance Officer

SDO = Shift Duty Officer

DOS = Duty Operations Supervisor

SWSD = Solid Waste Storage and Disposal

E/E = Evaluation/Exam

SWOC = Solid Waste Operations Complex

LLBG = Low Level Burial Ground

WRAP = Waste Receiving and Processing Facility

G-10

Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Applicable Location	Waste Service Providers				NCO					
				WMR	TSDR	Verifier	Waste Shipper	Surveillance	Storage	Facility Operator	Glovebox Operator	Shipping and Receiving	NDE-NDA Operator
WASTE SERVICES													
035010	Waste Designation (Classroom) ➤ <i>Dangerous waste designation and land disposal restrictions according to WAC 173-303</i>	Initial	CWC-WRAP	X	X	X							
035012	Waste Designation Qualification ^a (Classroom) ➤ <i>Waste designation and land disposal restrictions according to WAC 173-303</i>	Annual	CWC-WRAP	X	X	X							
153020	Waste Fundamentals Qualification Card (OJT) ➤ <i>Waste designation, waste management, land disposal restrictions, and recordkeeping</i>	Initial	CWC-WRAP	X	X	X							
153021	Waste Management Representative (WMR) Qualification Card (OJT) ➤ <i>Work control activities, waste planning and packaging documentation, and transportation requirements</i>	Initial	CWC-WRAP	X									
153022	Treatment Storage and Disposal Representative (TSDR) Qualification Card (OJT) ➤ <i>Waste acceptance and container reviews</i>	Initial	CWC-WRAP		X								
153116	Chemical Verification Qualification Card (OJT) ➤ <i>Chemical screening, reporting, and testing</i>	Initial	WRAP			X ^b							
153216	NDE Verification Qualification Card (OJT) ➤ <i>Verification on non-destructive examination, including review for waste discrepancies</i>	Initial	CWC-WRAP			X							

G-11

Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Applicable Location	Waste Service Providers				NCO					
				WMR	TSDR	Verifier	Waste Shipper	Surveillance	Storage	Facility Operator	Glovebox Operator	Shipping and Receiving	NDE-NDA Operator
153316	Visual Verification Specialist Qualification Card (OJT) ➤ <i>Visual verification including non-destructive examination, real time radiography, reviewing for waste discrepancies, and recordkeeping</i>	Initial	CWC-WRAP			X							
020159	Advanced Hazardous Waste Shipper Certification Training (Classroom) ➤ <i>Shipping techniques on hazardous waste labels, containers, packing, and manifesting</i>	Initial	CWC-WRAP				X						
020078	Advanced Mixed Waste Shipper Certification Training (Classroom) ➤ <i>Shipping techniques on hazardous waste labels, containers, packing, and manifesting</i>	Every 3 years	CWC-WRAP				X						
FACILITY OPERATIONS													
300400	Waste Management (OJT, PD) ➤ <i>SWSD waste management including waste receipt, abnormal containers, labeling, preventative measures</i>	Every 2 years	CWC					X	X				
300220	Central Waste Complex Surveillance Qualification (OJT, PD) ➤ <i>Surveillance activities associated with CWC and mandated by dangerous waste regulations</i>	Every 2 years	CWC					X					

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Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Applicable Location	Waste Service Providers				NCO					
				WMR	TSDR	Verifier	Waste Shipper	Surveillance	Storage	Facility Operator	Glovebox Operator	Shipping and Receiving	NDE-NDA Operator
300985	SWSD - Storage Operation Exam (OJT, PD) ➤ <i>Tasks associated with storage operations at CWC, including labeling, tracking, receipt and shipments, and waste placement</i>	Every 2 years	CWC						X				
306530	WRAP Facility Operator Qualification (OJT, PD) ➤ <i>Facility inspections, container management, and alarm response</i>	Initial	WRAP							X	X	X	X
306531	WRAP Facility Operator Requalification ^c (E/E, PD) ➤ <i>Inspections for container storage areas at WRAP</i>	Every 2 years	WRAP							X	X	X	X
306500	WRAP TRU Glovebox Operator Qualification (OJT, PD) ➤ <i>Glovebox system's process, equipment, operations, safety, and responses to the TRU gloveboxes</i>	Every 2 years	WRAP								X ^c		
306525	WRAP LLW/TRU Glovebox Operator Qualification (OJT, PD) ➤ <i>Glovebox system's process, equipment, operations, safety, and responses to the LLW/TRU gloveboxes.</i>	Every 2 years	WRAP								X ^c		
306720	WRAP LLW/TRU RWM Glovebox Operator Qualification (OJT, PD) ➤ <i>Glovebox system's process, equipment, operations, safety, and responses to the LLW/TRU RWM gloveboxes</i>	Initial	WRAP								X ^c		

Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Applicable Location	Waste Service Providers				NCO					
				WMR	TSDR	Verifier	Waste Shipper	Surveillance	Storage	Facility Operator	Glovebox Operator	Shipping and Receiving	NDE/NDA Operator
306725	WRAP LLW/TRU RWM Glovebox Operator Requalification ^a (OJT, PD) ➤ <i>Glovebox system's process, equipment, operations, safety, and responses to the LLW/TRU RWM gloveboxes</i>	Every 2 years	WRAP								X ^c		
306515	WRAP Shipping and Receiving Operator (OJT, PD) ➤ <i>Container receipt, storage, and shipping at the WRAP facility for hazardous or mixed waste</i>	Initial	WRAP									X	
306516	WRAP Shipping and Receiving Operator Requalification ^a (E/E, PD) ➤ <i>Container receipt and shipping at the WRAP facility for hazardous or mixed waste</i>	Every 2 years	WRAP									X	
306520	Non-Destructive Examination(NDE)/Non-Destructive Assay (NDA) Operator Qualification (E/E, OJT, PD) ➤ <i>System safety, automatic operation, operator interfaces, operator manual operations, and off normal responses</i>	Every 2 years	WRAP										X ^d

a. Refresher/requalification training is taken only after the initial training is completed.

b. Chemical screening is not being performed at this time. Certification will be required prior to resuming this activity.

c. Training is required for waste management activities prior to resuming glovebox operations.

d. Training is required for waste management activities prior to resuming NDE/NDA operations.

Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Applicable Location	Waste Service Providers				NCO					
				WMR	TSDR	Verifier	Waste Shipper	Surveillance	Storage	Facility Operator	Glovebox Operator	Shipping and Receiving	NDE-NDA Operator
CWC	= Central Waste Complex		PD	= Performance Demonstration									
E/E	= Evaluation/Exam		RWM	= Restricted Waste Management									
LLW	= Low Level Waste		SWSD	= Solid Waste Storage and Disposal									
NDA	= Nondestructive Assay		TRU	= Transuranic waste									
NDE	= Nondestructive Examination		TSDR	= Treatment Storage and Disposal Representative									
NCO	= Nuclear Chemical Operator		WRAP	= Waste Receiving and Processing Facility									
OJT	= On-the-Job Training		WMR	= Waste Management Representative									

Table G-3. CWC-WRAP Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Duty Operations Supervisor (DOS)/ Shift Duty Officer (SDO)	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Manage waste activities • Ensure corrective actions are addressed for problems identified by inspections • Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] • Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] • Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] • Review and approve environmental records 	<u>Requisite skills</u> Three years of nuclear facility experience, or education/ experience equivalent <u>Education</u> High School Diploma <u>Other qualifications</u> Operations Supervisor qualified
Operations Supervisor	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Supervise waste management activities • Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] • Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] • Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] • Prepare and submit environmental records 	<u>Requisite skills</u> Three years of nuclear facility experience, or education/ experience equivalent <u>Education</u> High School Diploma <u>Other qualifications</u> None
Waste Service Provider - Waste Management Representatives (WMR)	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Review results from physical or chemical screening on dangerous or mixed waste for waste transfer to SWOC • Choose containers for acceptance and determine container markings • Complete waste designations • Initiate process for waste shipments to TSDs for storage or disposal • Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2

Table G-3. CWC-WRAP Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Waste Service Provider - Treatment, Storage, and Disposal Unit Acceptance Representatives (TSDR)	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Review results from physical or chemical screening on dangerous or mixed waste for waste transfer to SWOC • Approve incoming TSD unit waste acceptance review • Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
Waste Service Provider - Verifiers	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Perform physical and/or chemical verifications on waste • Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
Waste Service Provider - Waste Shippers	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Prepare and certify waste shipment documentation for both onsite and off-site shipments of dangerous and/or mixed waste • Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma <u>Other qualifications</u> As detailed in Table G-2
Maintenance Crafts	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Manage dangerous or mixed waste during work activities • Perform maintenance on TSD buildings • Prepare and submit environmental records 	<u>Requisite skills</u> One year maintenance related <u>Education</u> None <u>Other qualifications</u> None
Nuclear Chemical Operator (NCO)	<i>(Note: These duties apply to all NCO categories.)</i> <ul style="list-style-type: none"> • Report discovered spills and releases • Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] • Evacuate or take cover in response to specific incidents • Manage dangerous or mixed waste during work activities • Apply container markings or labels • Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] • Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] • Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> None

Table G-3. CWC-WRAP Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
NCO - Surveillance	<ul style="list-style-type: none"> • Perform TSD unit daily inspections for areas subject to spills • Perform inspections on dangerous or mixed waste containers and areas • Perform inspections on emergency response equipment • Notify operations management of problems encountered during inspections 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
NCO - Storage	<ul style="list-style-type: none"> • Receive a transfer or shipment of dangerous or mixed waste • Transfer waste between CWC and other SWOC facilities 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
NCO – Facility Operator	<ul style="list-style-type: none"> • Perform TSD unit daily inspections for areas subject to spills • Perform inspections on dangerous or mixed waste containers and areas • Notify operations management of problems encountered during inspections 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
NCO – Glovebox Operator	<ul style="list-style-type: none"> • Waste management activities performed in a glovebox 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
NCO – Shipping and Receiving	<ul style="list-style-type: none"> • Receive a transfer or shipment of dangerous or mixed waste 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
NCO – Nondestructive Examination (NDE)- Nondestructive Assay (NDA) Operator	<ul style="list-style-type: none"> • Receive a transfer or shipment of dangerous or mixed waste • Perform NDE-NDA inspections on dangerous or mixed waste containers and areas; notify operations management of problems encountered during inspections 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2

Table G-3. CWC-WRAP Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Environmental Compliance Officer (ECO)	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Ensure operations are consistent with requirements contained in Dangerous Waste Regulations, WAC 173-303 Prepare and submit environmental records 	<u>Requisite skills</u> Experience with environmental regulations <u>Education</u> Bachelor of Arts or Bachelor of Science degree in a technical discipline or an equivalent combination of education and experience. <u>Other qualifications</u> None
Building Emergency Director (BED)*	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] Provide direction during emergencies, evacuation or take cover Perform RCRA Emergency Coordinator duties as the BED in Hanford Incident Command System Prepare and submit environmental records 	<u>Requisite skills</u> Three years nuclear facility experience <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> DOS/SDO qualified
Training Manager	<ul style="list-style-type: none"> Ensure the application of a graded, systematic approach to training program development and administration Ensure the training program will comply with WAC 173-303 Approve training program content and provide final approval 	<u>Requisite skills</u> Four years nuclear facility experience <u>Education</u> Bachelor of Science or Bachelor of Arts <u>Other qualifications</u> None

*Building Emergency Directors are DOSs/SDOs that have taken the BED training.

CWC = Central Waste Complex

SWOC = Solid Waste Operations Complex

DOS = Duty Operations Supervisor

TSD = Treatment, Storage, and/or Disposal

RCRA = *Resource Conservation and Recovery Act of 1976*

WRAP = Waste Receiving and Processing

SDO = Shift Duty Officer

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Addendum G
Personnel Training

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G1 Introduction

This addendum discusses personnel training requirements based on WAC 173-303, “Dangerous Waste Regulations,” and WA7890008967, *Hanford Facility Resource Conservation and Recovery Act Permit* (hereinafter called Hanford Facility RCRA Permit) for the Low-Level Burial Ground (LLBG) Trenches 31-34-94 Operating Unit Group (OUG), hereinafter referred to as LLBG Trenches 31-34-94.

Permittees will comply with the training outlined in Tables G-1 and G-2, which provide the training requirements for Hanford Facility personnel associated with dangerous and/or mixed waste management activities at LLBG Trenches 31-34-94.

G1.1 Introductory and Continuing Training Program

The dangerous waste training program consists of introductory and continuing training that are designed to prepare personnel to manage and maintain the LLBG Trenches 31-34-94 facilities in a safe, effective, and environmentally sound manner. In addition to preparing personnel to manage and maintain the LLBG Trenches 31-34-94 facilities under normal conditions, the training program ensures that personnel are prepared to respond in a prompt and effective manner should abnormal or emergency conditions occur. Emergency response training is consistent with the description of actions contained in LLBG Trenches 31-34-94 Addendum J, “Contingency Plan.”

The introductory and continuing training programs contain the following objectives:

- Teach Hanford Facility personnel to perform their duties in a way that ensures compliance with WAC 173-303.
- Teach Hanford Facility personnel dangerous waste management activities (including implementation of the contingency plan) relevant to the job titles/positions in which they are employed.
- Ensure Hanford Facility personnel can respond effectively to emergencies.

The introductory and continuing training programs meet the requirements of WAC 173-303-330, “Personnel Training,” through general Hanford Facility training, Contingency Plan training, Emergency Coordinator training, and Operations training as outlined in this section.

G1.1.1 Introductory Training

Introductory training includes general Hanford Facility training and unit-group specific training. General Hanford Facility training is described below. Unit-group specific training is provided to LLBG Trenches 31-34-94 personnel allowing those personnel to work unescorted, and in some cases is required for escorted access. Personnel cannot perform a task for which they are not properly trained, except to gain required experience while under the direct supervision of a supervisor or coworker who is properly trained as described in Section G2. Personnel must be trained within six months after their employment at or assignment to the Hanford Facility, or to a new job title/position at the Hanford Facility, whichever is later.

General Hanford Facility training: Hanford Facility personnel will receive general Hanford Facility training described in Hanford Facility RCRA Permit Attachment 5, “Hanford Facility Personnel Training Program,” within six months of hire. This training provides an orientation on dangerous waste management activities conducted at the Hanford Facility and includes the following:

- Description of emergency signals and appropriate personnel response

- 1 • Identification of contacts for information regarding dangerous waste management activities
- 2 • Introduction to waste minimization concepts
- 3 • Identification of contact(s) for emergencies involving dangerous waste
- 4 • Familiarization with the applicable portions of the Hanford Facility RCRA Permit Attachment 4,
- 5 “Hanford Emergency Management Plan” (DOE/RL-94-02)

6 The Permittees will provide the necessary training to non-LLBG Trenches 31-34-94 personnel or visitors
7 as appropriate for the locations and activities undertaken. Non- LLBG Trenches 31-34-94 personnel or
8 visitors include individuals not permanently assigned exclusively to the LLBG Trenches 31-34-94 facility
9 and who do not have dangerous waste management responsibilities or supervision of such activities.
10 These individuals include but are not limited to administrative personnel, regulatory oversight, transient
11 sampling personnel not permanently assigned to the LLBG Trenches 31-34-94 facility, and personnel
12 utilized for temporary assignments. For Soil and Groundwater Samplers, refer to Attachment 8, *Training*
13 *and Inspection Plan for Groundwater Monitoring Wells*.

14 Contingency Plan training: LLBG Trenches 31-34-94 personnel receive training on applicable portions of
15 DOE/RL-94-02 in the general LLBG Trenches 31-34-94 training. To ensure effective emergency
16 response, personnel receive training on the content of the actions described in Addendum J as well.

17 Emergency Coordinator training: LLBG Trenches 31-34-94 personnel facilitating emergency coordinator
18 duties, WAC 173-303-360, “Emergencies,” such as the Building Emergency Director (BED) within the
19 Hanford Incident Command System (ICS), receive training on implementing Addendum J and ICS BED
20 responsibilities. These personnel must also become thoroughly familiar with applicable contingency plan
21 documentation, operations, activities, location and properties of all waste handled, location of all records,
22 and the unit/building layout.

23 Emergency Coordinator training consists of the BED training courses required for facility BEDs
24 described in Table G-1.

25 Operations training: Dangerous waste management operations training (e.g., waste designation training,
26 shippers training) will be determined on a unit-by-unit basis and shall consider the type of activities
27 performed at the OUG (e.g., surveillance). Training provided for LLBG Trenches 31-34-94 operations is
28 identified in Tables G-1 and G-2. Operations training consists of the following subjects:

- 29 • Container management
- 30 • Waste handling
- 31 • Disposal operations
- 32 • Position specific training as detailed in Tables G-1 and G-2

33 **G1.1.2 Continuing Training**

34 In accordance with the requirements for WAC 173-303-330(1)(b), “Personnel Training,” dangerous waste
35 workers participate in an annual review of training, including general Hanford Facility training and unit-
36 group specific training. The frequencies for individual training courses is described below.

37 General Hanford Facility training: Annual refresher training is provided for general Hanford Facility
38 training. Refer to description in Section G1.1.1.

39 Contingency plan training: Annual refresher training is provided for contingency plan training. Refer to
40 description above in Section G1.1.1.

1 Emergency coordinator training: Annual refresher training is provided for emergency coordinator training
2 including the BED training course (Table G-1). Refer to description above in Section G1.1.1.

3 Operations training: Refresher training occurs on many frequencies (i.e., annual, every other year, and
4 every 3 years) for operations training. When justified, some training will not contain a refresher course
5 and will be identified as a one-time only training course. Tables G-1 and G-2 specify the frequency for
6 each training course.

7 **G2 Description of Training Program**

8 The dangerous waste training program is overseen by a training manager who is knowledgeable in
9 dangerous waste management procedures and is otherwise qualified to design a dangerous waste training
10 program by a combination of education and relevant experience. These qualifications are listed in
11 Table G-3 as required by WAC 173-303-330(2)(a).

12 Training elements of WAC 173-303-330(1)(e) applicable to the LLBG Trenches 31-34-94 operations
13 include the following:

- 14 • Procedures for using, inspecting, repairing, and replacing emergency and monitoring equipment
- 15 • Communications or alarm systems
- 16 • Response to fires or explosions

17 Proper design of the training program ensures LLBG Trenches 31-34-94 personnel responsible for
18 facilitating these elements are compliant with WAC 173-303 requirements. Actual job tasks, referred to as
19 duties, include the above-referenced elements and are used to determine training requirements. As such,
20 LLBG Trenches 31-34-94 personnel receive training pertinent to the duties they perform. LLBG
21 Trenches 31-34-94 duties are outlined in Table G-3. Tables G-1 and G-2 contain specific information
22 regarding the training requirements for LLBG Trenches 31-34-94 personnel.

23 **G2.1 Qualification of Staff (including OJT)**

24 Training consists of a combination of self-study, classroom instruction, computer-based training, and
25 on-the-job training (OJT) through the use of a qualification card.

26 A qualification card is the formal mechanism used to document the specialized training and performance
27 requirements of a specific job/task (e.g., waste management, waste shipping, etc.). Qualification cards list
28 the specific courses, required reading, and OJT activities that must be completed in order for personnel to
29 perform the job task independently. OJT activities involve qualified personnel demonstrating a specific
30 task, allowing the trainee to practice the task under supervision of the qualified OJT instructor.

31 The trainee's knowledge and skills are then evaluated against established standards. This can include
32 written and/or oral examinations, evaluations, and reviews to ensure that they are adequately trained
33 commensurate to their job title(s)/position(s). Results of examinations, evaluations, and reviews are
34 documented. Completed checklists, examinations and evaluations are placed in each individual's training
35 record.

36 These qualification cards are generally required to be completed within 6 months, as a means to record
37 that personnel who perform dangerous waste activities have been provided training within 6 months of
38 assignment. Qualification/proficiency training may, of necessity and in accordance with the provisions of
39 the collective bargaining agreements, take longer than 6 months to complete. In no case would

1 unqualified personnel be allowed to complete specified tasks without direct oversight of certified
2 personnel.

3 **G2.1 Review of the Training Program**

4 Facility training provides for frequent, systematic review of the various components of the training
5 program through multiple processes.

- 6 • All employees are required to complete Hanford General Employee Training (HGET) on an annual
7 basis. This training is subject to biennial evaluation by HGET Approval Authorities who review, and
8 revise HGET lessons when deemed necessary.
- 9 • The Permittee accounts for rule changes, facility changes, observed difficulties, and staff feedback to
10 incorporate changes to training curricula, and/or frequency to address such new or changing
11 circumstances.
- 12 • Another element of the training program is to ensure employees are assigned the correct training. To
13 accomplish this, annual employee training plan reviews are conducted by assigned managers.
- 14 • At the student level, the effectiveness of the training program is determined by reviewing student
15 feedback (e.g., evaluation forms) and evaluating student performance (e.g., test scores). Any changes
16 deemed necessary to the training, will be addressed with a revision and documented in the operating
17 record.
- 18 • The training matrices (Table G-1 and G-2) included in this addendum indicate regularly scheduled
19 (required) refresher training frequencies of individual courses for the express purpose of ensuring a
20 regimented review of course material at a topical level on a specified interval.

21 **G3 Description of Training Plan**

22 The WAC 173-303-330 requirements for training are satisfied by this addendum. A description of how
23 documentation meets the three items in WAC 173-303-330(2) is as follows:

24 WAC 173-303-330(2)(a): *The job title, job description, and name of the employee filling each job. The*
25 *job description must include requisite skills, education, other qualifications, and duties for each position.*

26 Description: The specific personnel job title/position is correlated to the dangerous waste
27 management duties. Dangerous waste management duties relating to WAC 173-303 are correlated to
28 training courses to verify that training is properly assigned.

29 Only names of LLBG Trenches 31-34-94 personnel who carry out duties relating to unit-group
30 dangerous waste management activities are maintained. A list of personnel assigned to LLBG
31 Trenches 31-34-94 is available upon request.

32 A summary of requisite skills, education, and other qualifications for job title(s)/position(s) is
33 summarized in Table G-3. Detailed information concerning job title, requisite skills, education, and
34 other qualifications for personnel can be provided upon request.

35 WAC 173-303-330(2)(b): *A written description of the type and amount of both introductory and*
36 *continuing training required for each position.*

37 Description: In addition to the outline provided in Section G1.1, training courses developed to comply
38 with the introductory and continuing training programs are identified and described in Tables G-1
39 and G-2. Certain job titles/positions identified in Table G-1 may have some variability of task

1 assignment/responsibility. Personnel assigned specific dangerous waste management duties within a
2 job title/position are only required to take the necessary training specific to those duties. Training for
3 assigned dangerous waste management duties are located in Table G-2.

4 Note that equivalent training can be used to meet the dangerous waste training requirements outlined
5 in Tables G-1 and G-2. Employees can substitute courses for the required training if the course is both
6 similar in nature and quality and accomplishes the duties of the position to which he or she is
7 assigned. Personnel must show by documentation or certification that an employee's training has
8 resulted in training equivalency to the training required.

9 WAC 173-303-330(2)(c): *Records documenting that personnel have received and completed the*
10 *training required by this section. The Department may require, on a case-by-case basis, that training*
11 *records include employee initials or signature to verify that training was received.*

12 Description: As specified in Permit Condition II.C.1., the Permittees will maintain documentation in
13 accordance with WAC 173-303-330(2) and (3) in the Hanford Facility Operating Record
14 (LLBG Trenches 31-34-94 portion).

15 Note that training records are maintained in accordance with the requirements of the *Privacy Act of*
16 *1974*. Training records for personnel are available for inspection purposes through 59 FR 17091,
17 which gives federal, state, and local government officers 'routine use' access to training records
18 where a regulatory program being implemented is applicable to a DOE or contractor program.

19

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position						
			SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
GENERAL									
000001	Hanford General Employee Training (CBT) ➤ <i>Standard alarms, chemical spills, security, hazards, signs, escorts, badge requirements, and overall safety</i>	Annual	X	X	X	X	X	X	X
FACILITY HEALTH & SAFETY									
300701	Central Waste Complex (CWC) Orientation (CBT) ➤ <i>LLBG facility overview, entry requirements, staging areas, and overall safety</i>	Initial	X	X	X ^b	X	X	X	X
300536	CWC, LLBG, and WRAP Facility Emergency and Hazard Identification Checklist (CBT) ➤ <i>Location/content of facility-specific hazards, hazard communication program, facility response actions, and waste management practices</i>	Annual	X	X	X ^b	X	X	X	X
WASTE MANAGEMENT									
035100	Container Waste Management (Classroom) ➤ <i>Waste minimization and pollution prevention, waste designation categories, recordkeeping, and container inspection and management</i>	Initial	X	X	X ^d	X ^e	X		
035110	Container Waste Management Refresher ^c (CBT) ➤ <i>Waste minimization and pollution prevention, waste designation categories, recordkeeping, and container inspection and management</i>	Annual	X	X	X ^d		X		
02006G	Waste Management Awareness (Classroom) ➤ <i>Introductory waste management topics, waste minimization, notifications, spills, and recordkeeping</i>	Initial				X ^e			
300400	Waste Management (OJT, PD) ➤ <i>SWSD waste management including waste receipt, abnormal containers, labeling, preventative measures</i>	Every 2 years					X		

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LLBG 31-34-94, OUG-17
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Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position						
			SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
BUILDING EMERGENCY									
02028B	Building Emergency Director Initial Training (Classroom) ➤ <i>BED performance expectations and responsibilities as outlined in DOE/RL-94-02 for preparation, response, and recovery from emergency events at respective facility</i>	Initial							X
037515	Building Emergency Director Refresher Training ^c (CBT) ➤ <i>Refresher for BED performance expectations and responsibilities as outlined in DOE/RL-94-02</i>	Annual							X
304466	SWOC Building Emergency Director Qualification Card Checklist (OJT) ➤ <i>Emergency response actions and responsibilities of the BED specific to SWOC facilities</i>	Initial							X
ENVIRONMENTAL									
600100	Environmental Compliance Officer – Core (OJT) ➤ <i>Knowledge of environmental regulations, permits, regulator inspections and notifications, recordkeeping, and pollution prevention practices</i>	Initial						X	
600304	Waste Disposition – ECO (OJT) ➤ <i>Facility specific environmental requirements and processes, including management of regulated waste and environmental impacts from operations</i>	Initial						X ^f	
FACILITY MANAGEMENT									
300402	SWSD Waste Management Exam (E/E) ➤ <i>Waste management at SWSD</i>	Every 2 years	X	X					
300451	LLBG Surveillance Exam (E/E) ➤ <i>Surveillance activities associated with LLBG Trenches 31-34-94 and mandated by dangerous waste regulations and internal procedures</i>	Every 2 years	X	X					

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LLBG 31-34-94, OUG-17
JULY 2019

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position						
			SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
300933	LLBG Disposal Operations Exam (E/E) ➤ <i>Tasks associated with disposal operations at LLBG Trenches 31-34-94</i>	Every 2 years	X	X					
300987	Trench 31/34 Operations Exam (E/E) ➤ <i>Tasks associated with sampling and inspections at LLBG Trench 31-34</i>	Every 2 years	X	X					
300226	Core Fundamentals for Shift Managers in Training Qualification Card (OJT) ➤ <i>Management of activities and tasks associated with emergency response, emergency or abnormal operations, inspections, and communications</i>	Initial	X						
604241	Field Work Supervisor Qualification Card (OJT) ➤ <i>Management of activities and tasks associated with emergency response, environmental permits, and reporting</i>	Initial	X	X					
301130	CWC/LLBG Operations Supervisor Qualification Card (OJT, PD) ➤ <i>Facility specific management of activities and tasks associated with emergency response, emergency or abnormal operations, inspections, and communications</i>	Every 2 years	X	X					
301135	CWC/LLBG Shift Duty Officer Qualification Card (OJT, PD) ➤ <i>Management of activities and tasks associated with emergency response, inspections, and container shipments</i>	Every 2 years	X						

a. See Table G-2 for qualification training needed for specific Waste Service Provider and NCO duties.

b. Personnel that do not have this training will be escorted.

c. Refresher/qualification training is taken only after the initial training is completed.

d. Course not required for Waste Service Providers – Waste Shipper.

e. Maintenance Crafts may take course 02006G or 035100. Course 02006G is an awareness level class that satisfies the requirements of the job duties. Course 035100 is an operational level class that satisfies and exceeds the requirements identified in course 02006G.

f. Required training only for permanently assigned ECO.

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position						
			SDO	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECCO	BED
BED =	Building Emergency Director	NCO =	Nuclear Chemical Operator						
CBT =	Computer Based Training	OJT =	On-the-Job Training						
CWC =	Central Waste Complex	PD =	Performance Demonstration						
ECO =	Environmental Compliance Officer	SDO =	Shift Duty Officer						
E/E =	Evaluation/Exam	SWOC =	Solid Waste Operations Complex						
LLBG =	Low Level Burial Ground	SWSD =	Solid Waste Storage and Disposal						

Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Waste Service Providers				NCO		
			WMR	TSDR	Verifier	Waste Shipper	LLBG Surveillance	LLBG Trench 31/34 Operations	Disposal Operations
WASTE SERVICES									
035010	Waste Designation (Classroom) ➤ <i>Dangerous waste designation and land disposal restrictions according to WAC 173-303</i>	Initial	X	X	X				
035012	Waste Designation Qualification* (Classroom) ➤ <i>Waste designation and land disposal restrictions according to WAC 173-303</i>	Annual	X	X	X				
153020	Waste Fundamentals Qualification Card (OJT) ➤ <i>Waste designation, waste management, land disposal restrictions, and recordkeeping</i>	Initial	X	X	X				
153021	Waste Management Representative (WMR) Qualification Card (OJT) ➤ <i>Work control activities, waste planning and packaging documentation, and transportation requirements</i>	Initial	X						
153022	Treatment Storage and Disposal Representative (TSDR) Qualification Card (OJT) ➤ <i>Waste acceptance and container reviews</i>	Initial		X					
153316	Visual Verification Specialist Qualification Card (OJT) ➤ <i>Visual verification including non-destructive examination, real time radiography, reviewing for waste discrepancies, and recordkeeping</i>	Initial			X				
020159	Advanced Hazardous Waste Shipper Certification Training (Classroom) ➤ <i>Shipping techniques on hazardous waste labels, containers, packing, and manifesting</i>	Initial				X			

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Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Waste Service Providers				NCO		
			WMR	TSDR	Verifier	Waste Shipper	LLBG Surveillance	LLBG Trench 31/34 Operations	Disposal Operations
020078	Advanced Mixed Waste Shipper Certification Training (Classroom) ➤ <i>Shipping techniques on hazardous waste labels, containers, packing, and manifesting</i>	Every 3 years				X			
FACILITY OPERATIONS									
300450	LLBG Surveillance Operations Qualification Card (OJT, PD) ➤ <i>Surveillance activities associated with LLBG Trenches 31-34-94 and mandated by dangerous waste regulations</i>	Every 2 years					X		
300986	Trench 31/34 Operations, Sampling, and Inspection (OJT, PD) ➤ <i>Tasks associated with LLBG Trench 31/34 leachate collection system</i>	Every 2 years						X	
300932	SWSD Disposal Operations (OJT, PD) ➤ <i>Tasks associated with disposal operations at LLBG Trenches 31-34-94, including waste receipt and disposal processes</i>	Every 2 years							X

*Refresher/requalification training is taken only after the initial training is completed.

LLBG = Low Level Burial Ground
 NCO = Nuclear Chemical Operator
 PD = Performance Demonstration
 OJT = On-the-Job Training

SWSD = Solid Waste Storage and Disposal
 TSDR = Treatment Storage and Disposal Representative
 WMR = Waste Management Representative

Table G-3. LLBG Trenches 31-34-94 Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Shift Duty Officer (SDO)	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Manage waste activities • Ensure corrective actions are addressed for problems identified by inspections • Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] • Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] • Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] • Respond to groundwater contamination incidents [Element of WAC 173-303-330(1)(e)] • Review and approve environmental records 	<p><u>Requisite skills</u> Three years of nuclear facility experience, or education/experience equivalent</p> <p><u>Education</u> High School Diploma</p> <p><u>Other qualifications</u> Operations Supervisor qualified</p>
Operations Supervisor	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Supervise waste management activities • Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] • Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] • Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] • Respond to groundwater contamination incidents [Element of WAC 173-303-330(1)(e)] • Prepare and submit environmental records 	<p><u>Requisite skills</u> Three years of nuclear facility experience, or education/experience equivalent</p> <p><u>Education</u> High School Diploma</p> <p><u>Other qualifications</u> None</p>
Waste Service Provider - Waste Management Representatives (WMR)	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Review results from physical or chemical screening on dangerous or mixed waste for waste transfer to SWOC • Choose containers for acceptance and determine container markings • Complete waste designations • Initiate process for waste shipments to TSDs for storage or disposal • Prepare and submit environmental records 	<p><u>Requisite skills</u> None</p> <p><u>Education</u> High school diploma or equivalent</p> <p><u>Other qualifications</u> As detailed in Table G-2</p>

Table G-3. LLBG Trenches 31-34-94 Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Waste Service Provider - Treatment, Storage, and Disposal Unit Acceptance Representatives (TSDR)	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Review results from physical or chemical screening on dangerous or mixed waste for waste transfer to SWOC Approve incoming TSD unit waste acceptance review Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
Waste Service Provider - Verifiers	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Perform physical and/or chemical verifications on waste Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
Waste Service Provider - Waste Shippers	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Prepare and certify waste shipment documentation for both onsite and off-site shipments of dangerous and/or mixed waste Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma <u>Other qualifications</u> As detailed in Table G-2
Maintenance Crafts	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Manage dangerous or mixed waste during work activities Perform maintenance on TSD buildings Prepare and submit environmental records 	<u>Requisite skills</u> One year maintenance related <u>Education</u> None <u>Other qualifications</u> None
Nuclear Chemical Operator (NCO)	<p><i>(Note: These duties apply to all NCO categories.)</i></p> <ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] Manage dangerous or mixed waste during work activities Apply container markings or labels Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> None

Table G-3. LLBG Trenches 31-34-94 Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
NCO – LLBG Surveillance	<ul style="list-style-type: none"> Perform inspections on dangerous or mixed waste containers and areas Perform landfill inspections Notify operations management of problems encountered during inspections 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
NCO – LLBG Trench 31/34 Operations	<ul style="list-style-type: none"> Perform inspections on leachate collection system Notify operations management of problems encountered during inspections 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
NCO – Disposal Operations	<ul style="list-style-type: none"> Receive a transfer or shipment of dangerous or mixed waste and place in trench 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
Environmental Compliance Officer (ECO)	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Ensure operations are consistent with requirements contained in Dangerous Waste Regulations, WAC 173-303 Prepare and submit environmental records 	<u>Requisite skills</u> Experience with environmental regulations <u>Education</u> Bachelor of Arts or Bachelor of Science degree in a technical discipline or an equivalent combination of education and experience. <u>Other qualifications</u> None
Building Emergency Director (BED)*	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] Provide direction during emergencies, evacuation or take cover Perform RCRA Emergency Coordinator duties as the BED in Hanford Incident Command System Prepare and submit environmental records 	<u>Requisite skills</u> Three years nuclear facility experience <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> SDO qualified

Table G-3. LLBG Trenches 31-34-94 Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Training Manager	<ul style="list-style-type: none"> • Ensure the application of a graded, systematic approach to training program development and administration • Ensure the training program will comply with WAC 173-303 • Approve training program content and provide final approval 	<u>Requisite skills</u> Four years nuclear facility experience <u>Education</u> Bachelor of Science or Bachelor of Arts <u>Other qualifications</u> None

*Building Emergency Directors are SDOs that have taken the BED training.

- LLBG = Low Level Burial Grounds
 RCRA = *Resource Conservation and Recovery Act of 1976*
 SDO = Shift Duty Officer
 SWOC = Solid Waste Operations Complex
 TSD = Treatment, Storage, and/or Disposal

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Addendum G
Personnel Training

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- 1 • Identification of contact(s) for emergencies involving dangerous waste
- 2 • Familiarization with the applicable portions of the Hanford Facility RCRA Permit Attachment 4,
3 “Hanford Emergency Management Plan” (DOE/RL-94-02)
- 4 The Permittees will provide the necessary training to non-T Plant personnel or visitors as appropriate for
5 the locations and activities undertaken. Non-T Plant personnel or visitors include individuals not
6 permanently assigned exclusively to the T Plant facility and who do not have dangerous waste
7 management responsibilities or supervision of such activities. These individuals include but are not
8 limited to administrative personnel, regulatory oversight, transient sampling personnel not permanently
9 assigned to the T Plant facility, and personnel utilized for temporary assignments. For Soil and
10 Groundwater Samplers, refer to Attachment 8, *Training and Inspection Plan for Groundwater Monitoring*
11 *Wells*.
- 12 Contingency Plan training: T Plant personnel receive training on applicable portions of DOE/RL-94-02 in
13 the general T Plant training. To ensure effective emergency response, personnel receive training on the
14 content of the actions described in Addendum J as well.
- 15 Emergency Coordinator training: T Plant personnel facilitating emergency coordinator duties,
16 WAC 173-303-360, “Emergencies,” such as the Building Emergency Director (BED) within the Hanford
17 Incident Command System (ICS), receive training on implementing Addendum J and ICS BED
18 responsibilities. These personnel must also become thoroughly familiar with applicable contingency plan
19 documentation, operations, activities, location and properties of all waste handled, location of all records,
20 and the unit/building layout.
- 21 Emergency Coordinator training consists of the BED training courses required for facility BEDs
22 described in Table G-1.
- 23 Operations training: Dangerous waste management operations training (e.g., waste designation training,
24 shippers training) will be determined on a unit-by-unit basis and shall consider the type of activities
25 performed at the OUG (e.g., surveillance). Training provided for T Plant operations is identified in
26 Tables G-1 and G-2. Operations training consists of the following subjects:
- 27 • Container management
- 28 • Waste handling
- 29 • Container packaging and labeling
- 30 • Position specific training as detailed in Tables G-1 and G-2

31 **G1.1.2 Continuing Training**

32 In accordance with the requirements for WAC 173-303-330(1)(b), “Personnel Training,” dangerous waste
33 workers participate in an annual review of training, including general Hanford Facility training and unit-
34 group specific training. The frequencies for individual training courses is described below.

35 General Hanford Facility training: Annual refresher training is provided for general Hanford Facility
36 training. Refer to description in Section G1.1.1.

37 Contingency plan training: Annual refresher training is provided for contingency plan training. Refer to
38 description above in Section G1.1.1.

39 Emergency coordinator training: Annual refresher training is provided for emergency coordinator training
40 including the BED training course (Table G-1). Refer to description above in Section G1.1.1.

41 Operations training: Refresher training occurs on many frequencies (i.e., annual, every other year, and
42 every 3 years) for operations training. When justified, some training will not contain a refresher course

1 and will be identified as a one-time only training course. Tables G-1 and G-2 specify the frequency for
2 each training course.

3 **G2 Description of Training Program**

4 The dangerous waste training program is overseen by a training manager who is knowledgeable in
5 dangerous waste management procedures and is otherwise qualified to design a dangerous waste training
6 program by a combination of education and relevant experience. These qualifications are listed in
7 Table G-3 as required by WAC 173-303-330(2)(a).

8 Training elements of WAC 173-303-330(1)(e) applicable to the T Plant operations include the following:

- 9 • Procedures for using, inspecting, repairing, and replacing emergency and monitoring equipment
- 10 • Communications or alarm systems
- 11 • Response to fires or explosions

12 Proper design of the training program ensures T Plant personnel responsible for facilitating these elements
13 are compliant with WAC 173-303 requirements. Actual job tasks, referred to as duties, include the above-
14 referenced elements and are used to determine training requirements. As such, T Plant personnel receive
15 training pertinent to the duties they perform. T Plant duties are outlined in Table G-3. Tables G-1 and G-2
16 contain specific information regarding the training requirements for T Plant personnel.

17 **G2.1 Qualification of Staff (including OJT)**

18 Training consists of a combination of self-study, classroom instruction, computer-based training, and on-
19 the-job training (OJT) through the use of a qualification card.

20 A qualification card is the formal mechanism used to document the specialized training and performance
21 requirements of a specific job/task (e.g., waste management, waste shipping, etc.). Qualification cards list
22 the specific courses, required reading, and OJT activities that must be completed in order for personnel to
23 perform the job task independently. OJT activities involve qualified personnel demonstrating a specific
24 task, allowing the trainee to practice the task under supervision of the qualified OJT instructor.

25 The trainee's knowledge and skills are then evaluated against established standards. This can include
26 written and/or oral examinations, evaluations, and reviews to ensure that they are adequately trained
27 commensurate to their job title(s)/position(s). Results of examinations, evaluations, and reviews are
28 documented. Completed checklists, examinations and evaluations are placed in each individual's training
29 record.

30 These qualification cards are generally required to be completed within 6 months, as a means to record
31 that personnel who perform dangerous waste activities have been provided training within 6 months of
32 assignment. Qualification/proficiency training may, of necessity and in accordance with the provisions of
33 the collective bargaining agreements, take longer than 6 months to complete. In no case would
34 unqualified personnel be allowed to complete specified tasks without direct oversight of certified
35 personnel.

1 **G2.2 Review of the Training Program**

2 Facility training provides for frequent, systematic review of the various components of the training
3 program through multiple processes.

- 4 • All employees are required to complete Hanford General Employee Training (HGET) on an annual
5 basis. This training is subject to biennial evaluation by HGET Approval Authorities who review, and
6 revise HGET lessons when deemed necessary.
- 7 • The Permittee accounts for rule changes, facility changes, observed difficulties, and staff feedback to
8 incorporate changes to training curricula, and/or frequency to address such new or changing
9 circumstances.
- 10 • Another element of the training program is to ensure employees are assigned the correct training. To
11 accomplish this, annual employee training plan reviews are conducted by assigned managers.
- 12 • At the student level, the effectiveness of the training program is determined by reviewing student
13 feedback (e.g., evaluation forms) and evaluating student performance (e.g., test scores). Any changes
14 deemed necessary to the training, will be addressed with a revision and documented in the operating
15 record.
- 16 • The training matrices (Table G-1 and G-2) included in this addendum indicate regularly scheduled
17 (required) refresher training frequencies of individual courses for the express purpose of ensuring a
18 regimented review of course material at a topical level on a specified interval.

19 **G3 Description of Training Plan**

20 The WAC 173-303-330 requirements for training are satisfied by this addendum. A description of how
21 documentation meets the three items in WAC 173-303-330(2) is as follows:

22 *WAC 173-303-330(2)(a): The job title, job description, and name of the employee filling each job. The*
23 *job description must include requisite skills, education, other qualifications, and duties for each position.*

24 Description: The specific personnel job title/position is correlated to the dangerous waste
25 management duties. Dangerous waste management duties relating to WAC 173-303 are correlated to
26 training courses to verify that training is properly assigned.

27 Only names of T Plant personnel who carry out duties relating to unit-group dangerous waste
28 management activities are maintained. A list of personnel assigned to T Plant is available upon
29 request.

30 A summary of requisite skills, education, and other qualifications for job title(s)/position(s) is
31 summarized in Table G-3. Detailed information concerning job title, requisite skills, education, and
32 other qualifications for personnel can be provided upon request.

33 *WAC 173-303-330(2)(b): A written description of the type and amount of both introductory and*
34 *continuing training required for each position.*

35 Description: In addition to the outline provided in Section G1.1, training courses developed to comply
36 with the introductory and continuing training programs are identified and described in Tables G-1 and
37 G-2. Certain job titles/positions identified in Table G-1 may have some variability of task
38 assignment/responsibility. Personnel assigned specific dangerous waste management duties within a
39 job title/position are only required to take the necessary training specific to those duties. Training for
40 assigned dangerous waste management duties are located in Table G-2.

1 Note that equivalent training can be used to meet the dangerous waste training requirements outlined
2 in Tables G-1 and G-2. Employees can substitute courses for the required training if the course is both
3 similar in nature and quality and accomplishes the duties of the position to which he or she is
4 assigned. Personnel must show by documentation or certification that an employee's training has
5 resulted in training equivalency to the training required.

6 WAC 173-303-330(2)(c): *Records documenting that personnel have received and completed the*
7 *training required by this section. The Department may require, on a case-by-case basis, that training*
8 *records include employee initials or signature to verify that training was received.*

9 Description: As specified in Permit Condition II.C.1., the Permittees will maintain documentation in
10 accordance with WAC 173-303-330(2) and (3) in the Hanford Facility Operating Record (T Plant
11 portion).

12 Note that training records are maintained in accordance with the requirements of the *Privacy Act of*
13 *1974*. Training records for personnel are available for inspection purposes through 59 FR 17091,
14 which gives federal, state, and local government officers 'routine use' access to training records
15 where a regulatory program being implemented is applicable to a DOE or contractor program.

Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position						
			DOS	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
GENERAL									
000001	Hanford General Employee Training (CBT) ➤ <i>Standard alarms, chemical spills, security, hazards, signs, escorts, badge requirements, and overall safety</i>	Annual	X	X	X	X	X	X	X
FACILITY HEALTH & SAFETY									
450700	T Plant Facility Orientation (CBT) ➤ <i>T Plant facility overview, entry requirements, staging areas, and overall safety</i>	Initial	X	X	X ^b	X	X	X	X
03E048	T Plant Facility Emergency and Hazard Identification Checklist (CBT) ➤ <i>Location/content of facility-specific hazards, hazard communication program, facility response actions, and waste management practices</i>	Annual	X	X	X ^b	X	X	X	X
WASTE MANAGEMENT									
035100	Container Waste Management (Classroom) ➤ <i>Waste minimization and pollution prevention, waste designation categories, recordkeeping, and container inspection and management</i>	Initial	X	X	X ^d	X ^e	X		
035110	Container Waste Management Refresher ^c (CBT) ➤ <i>Waste minimization and pollution prevention, waste designation categories, recordkeeping, and container inspection and management</i>	Annual	X	X	X ^d		X		
02006G	Waste Management Awareness (Classroom) ➤ <i>Introductory waste management topics, waste minimization, notifications, spills, and recordkeeping</i>	Initial				X ^e			
450160	T Plant Waste Handling Qualification (OJT, PD) ➤ <i>Container management, packaging waste, shipping and receiving waste</i>	Every 2 years	X	X			X		

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Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position						
			DOS	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
BUILDING EMERGENCY									
02028B	Building Emergency Director Initial Training (Classroom) ➤ <i>BED performance expectations and responsibilities as outlined in DOE/RL-94-02 for preparation, response, and recovery from emergency events at respective facility</i>	Initial							X
037515	Building Emergency Director Refresher Training ^e (CBT) ➤ <i>Refresher for BED performance expectations and responsibilities as outlined in DOE/RL-94-02</i>	Annual							X
ENVIRONMENTAL									
600100	Environmental Compliance Officer – Core (OJT) ➤ <i>Knowledge of environmental regulations, permits, regulator inspections and notifications, recordkeeping, and pollution prevention practices</i>	Initial						X	
600304	Waste Disposition – ECO (OJT) ➤ <i>Facility specific environmental requirements and processes, including management of regulated waste and environmental impacts from operations</i>	Initial						X ^f	
FACILITY MANAGEMENT									
300226	Core Fundamentals for Shift Managers in Training Qualification Card (OJT) ➤ <i>Management of activities and tasks associated with emergency response, emergency or abnormal operations, inspections, and communications</i>	Initial	X						
604241	Field Work Supervisor Qualification Card (OJT) ➤ <i>Management of activities and tasks associated with emergency response, environmental permits, and reporting</i>	Initial	X	X					
451130	T Plant Duty Operations Supervisor Qualification Card (OJT, PD) ➤ <i>Management of activities and tasks associated with emergency response, inspections, and waste shipping</i>	Every 2 years	X						

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Table G-1. Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position						
			DOS	Operations Supervisor	Waste Service Provider ^a	Maintenance Crafts	NCO ^a	ECO	BED
451140	T Plant Operations Supervisor Qualification Card (OJT, PD) ➤ <i>Management of activities and tasks associated with emergency response and waste management</i>	Every 2 years	X	X					

- a. See Table G-2 for qualification training needed for specific Waste Service Provider and NCO duties.
- b. Personnel that do not have this training will be escorted.
- c. Refresher/requalification training is taken only after the initial training is completed.
- d. Course not required for Waste Service Providers – Waste Shipper.
- e. Maintenance Crafts may take course 02006G or 035100. Course 02006G is an awareness level class that satisfies the requirements of the job duties. Course 035100 is an operational level class that satisfies and exceeds the requirements identified in course 02006G.
- f. Required training only for permanently assigned ECO.

BED = Building Emergency Director NCO = Nuclear Chemical Operator
 CBT = Computer Based Training OJT = On-the-Job Training
 DOS = Duty Operations Supervisor PD = Performance Demonstration
 ECO = Environmental Compliance Officer

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Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Waste Service Providers				NCO- Operations Support
			WMR	TSDR	Verifier	Waste Shipper	
WASTE SERVICES							
035010	Waste Designation (Classroom) ➤ <i>Dangerous waste designation and land disposal restrictions according to WAC 173-303</i>	Initial	X	X	X		
035012	Waste Designation Qualification ^a (Classroom) ➤ <i>Waste designation and land disposal restrictions according to WAC 173-303</i>	Annual	X	X	X		
153020	Waste Fundamentals Qualification Card (OJT) ➤ <i>Waste designation, waste management, land disposal restrictions, and recordkeeping</i>	Initial	X	X	X		
153021	Waste Management Representative (WMR) Qualification Card (OJT) ➤ <i>Work control activities, waste planning and packaging documentation, and transportation requirements</i>	Initial	X				
153022	Treatment Storage and Disposal Representative (TSDR) Qualification Card (OJT) ➤ <i>Waste acceptance and container reviews</i>	Initial		X			
153116	Chemical Verification Qualification Card (OJT) ➤ <i>Chemical screening, reporting, and testing</i>	Initial			X ^b		
153216	NDE Verification Qualification Card (OJT) ➤ <i>Verification on non-destructive examination, including review for waste discrepancies</i>	Initial			X		
153316	Visual Verification Specialist Qualification Card (OJT) ➤ <i>Visual verification including non-destructive examination, real time radiography, reviewing for waste discrepancies, and recordkeeping</i>	Initial			X		
020159	Advanced Hazardous Waste Shipper Certification Training (Classroom) ➤ <i>Shipping techniques on hazardous waste labels, containers, packing, and manifesting</i>	Initial				X	

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Table G-2. Qualification Training for Specific Duties

Course Number	Course Title/Description	Frequency	Waste Service Providers				NCO- Operations Support
			WMR	TSDR	Verifier	Waste Shipper	
020078	Advanced Mixed Waste Shipper Certification Training (Classroom) ➤ <i>Shipping techniques on hazardous waste labels, containers, packing, and manifesting</i>	Every 3 years				X	
FACILITY OPERATIONS							
450140	T Plant Base Operations (OJT, PD) ➤ <i>Surveillance activities associated with T Plant including emergency equipment inspections</i>	Every 2 years					X
450150	T Plant Surveillance Qualifications (OJT, PD) ➤ <i>Surveillance activities associated with T Plant and alarm responses</i>	Every 2 years					X
450165	T Plant Waste Surveillance and Compliance (OJT, PD) ➤ <i>Tasks associated with surveillance of waste management areas</i>	Every 2 years					X

a. Refresher/requalification training is taken only after the initial training is completed.

b. Chemical screening is not being performed at this time. Certification will be required prior to resuming this activity.

NDE = Nondestructive Examination

NCO = Nuclear Chemical Operator

OJT = On-the-Job Training

PD = Performance Demonstration

TSDR = Treatment Storage and Disposal Representative

WMR = Waste Management Representative

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Table G-3. T Plant Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Duty Operations Supervisor (DOS)	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Manage waste activities • Ensure corrective actions are addressed for problems identified by inspections • Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] • Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] • Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] • Review and approve environmental records 	<p><u>Requisite skills</u> Three years of nuclear facility experience, or education/experience equivalent</p> <p><u>Education</u> High School Diploma</p> <p><u>Other qualifications</u> Operations Supervisor qualified</p>
Operations Supervisor	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Supervise waste management activities • Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] • Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] • Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] • Prepare and submit environmental records 	<p><u>Requisite skills</u> Three years of nuclear facility experience, or education/experience equivalent</p> <p><u>Education</u> High School Diploma</p> <p><u>Other qualifications</u> None</p>
Waste Service Provider - Waste Management Representatives (WMR)	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Review results from physical or chemical screening on dangerous or mixed waste for waste transfer to SWOC • Choose containers for acceptance and determine container markings • Complete waste designations • Initiate process for waste shipments to TSDs for storage or disposal • Prepare and submit environmental records 	<p><u>Requisite skills</u> None</p> <p><u>Education</u> High school diploma or equivalent</p> <p><u>Other qualifications</u> As detailed in Table G-2</p>

Table G-3. T Plant Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Waste Service Provider - Treatment, Storage, and Disposal Unit Acceptance Representatives (TSDR)	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Review results from physical or chemical screening on dangerous or mixed waste for waste transfer to SWOC • Approve incoming TSD unit waste acceptance review • Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
Waste Service Provider - Verifiers	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Perform physical and/or chemical verifications on waste • Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma or equivalent <u>Other qualifications</u> As detailed in Table G-2
Waste Service Provider - Waste Shippers	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Prepare and certify waste shipment documentation for both onsite and off-site shipments of dangerous and/or mixed waste • Prepare and submit environmental records 	<u>Requisite skills</u> None <u>Education</u> High school diploma <u>Other qualifications</u> As detailed in Table G-2
Maintenance Crafts	<ul style="list-style-type: none"> • Report discovered spills and releases • Evacuate or take cover in response to specific incidents • Manage dangerous or mixed waste during work activities • Perform maintenance on TSD buildings • Prepare and submit environmental records 	<u>Requisite skills</u> One year maintenance related <u>Education</u> None <u>Other qualifications</u> None

Table G-3. T Plant Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Nuclear Chemical Operator (NCO) – Operations Support	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Manage dangerous or mixed waste during work activities Use emergency and monitoring equipment [Element of WAC 173-303-330(1)(e)] Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] Respond to fires or explosions [Element of WAC 173-303-330(1)(e)] Receive a transfer or shipment of dangerous or mixed waste Perform TSD unit daily inspections for areas subject to spills Apply container markings or labels Perform inspections on dangerous or mixed waste containers and areas Notify operations management of problems encountered during inspections Waste management duties to support storage and treatment activities within containment buildings Prepare and submit environmental records 	<p><u>Requisite skills</u> None</p> <p><u>Education</u> High school diploma or equivalent</p> <p><u>Other qualifications</u> None</p>
Environmental Compliance Officer (ECO)	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Ensure operations are consistent with requirements contained in Dangerous Waste Regulations, WAC 173-303 Prepare and submit environmental records 	<p><u>Requisite skills</u> Experience with environmental regulations</p> <p><u>Education</u> Bachelor of Science or Bachelor of Arts degree in a technical discipline or an equivalent combination of education and experience.</p> <p><u>Other qualifications</u> None</p>
Building Emergency Director (BED)*	<ul style="list-style-type: none"> Report discovered spills and releases Evacuate or take cover in response to specific incidents Respond to and use communications or alarm systems [Element of WAC 173-303-330(1)(e)] Provide direction during emergencies, evacuation or take cover Perform RCRA Emergency Coordinator duties as the BED in Hanford Incident Command System Prepare and submit environmental records 	<p><u>Requisite skills</u> Three years nuclear facility experience</p> <p><u>Education</u> High school diploma or equivalent</p> <p><u>Other qualifications</u> DOS qualified</p>

Table G-3. T Plant Job Description

Job Title/Position	Job Description	
	Duties	Requisite skills, education, other qualifications
Training Manager	<ul style="list-style-type: none"> • Ensure the application of a graded, systematic approach to training program development and administration • Ensure the training program will comply with WAC 173-303 • Approve training program content and provide final approval 	<u>Requisite skills</u> Four years nuclear facility experience <u>Education</u> Bachelor of Science or Bachelor of Arts <u>Other qualifications</u> None

*Building Emergency Directors are DOSs that have taken the BED training.

- DOS = Duty Operations Supervisor
- NDA = Nondestructive Assay
- NDE = Nondestructive Examination
- RCRA = *Resource Conservation and Recovery Act of 1976*
- SWOC = Solid Waste Operations Complex
- TSD = Treatment, Storage, and/or Disposal